03CO CASE JB0800

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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In re Application of:

Malcolm et al.

Serial No.: 09/198,723

Filed: November 24, 1998

Examiner: To be Assigned

Group Art Unit: To be Assigned

Date: August 10, 1999

For: SINGLE-CHAIN RECOMBINANT COMPLEXES OF HEPATITIS C

VIRUS NS3 PROTEASE AND NS4A COFACTOR PEPTIDE

## Information Disclosure Statement

Assistant Commissioner For Patents Washington, D.C. 20231

Sir,

It is respectfully requested that the following documents, as listed below and on the accompanying form PTO-1449, be considered and made of record:

Urbani et al., 1997, J. Biol. Chem 272 (14): 9204-9209;

Steinkuhler et al., 1996, J. Virology, **70** (10): 6694-6700;

Landro et al., 1997, Biochemistry 36, 9340-9348;

Zhang et al., 1997, J. Virology 71 (8): 6208-6213;

Kim et al., 1996, "Crystal Structure of the Hepatitis C Virus NS3 Domain Complexed with A Synthetic NS4A Cofactor Peptide," Cell 87 (4): 343-355;

Yan et al., 1998, "Complex of NS3 Protease and NS4 Peptide of BK Strain Hepatitis C Virus," *Protein Science*, **7** (4): 837-347;

Bartenschlager, et al., 1995 "Complex Formation Between The NS3 Serine-Type Proteinase of the Hepatitis C Virus and NS4A and Its Importance For Polyprotein Maturation," J. Virology 69 (12): 7519-7528

Lin *et al.*, 1994, "Hepatitis C Virus NS3 Serine Proteinase: Trans-Cleavage Requirements and Processing Kinetics," *J. Virology*, **68** (12): 8147-8157;

Kim et al., 1995, "C-Terminal Domain of the Hepatitis C Virus NS3 Protein Contains An RNA Helicase Activity," *Biochemical and Biophysical Research Communications*, **215** (1,4): 160-166

Taremi *et al.*, 1998, "Construction, Expression, and Characterization of a Novel Fully Activated Recombinant Single-Chain Hepatitis C Virus Protease," *Protein Science*, **7** (10): 2143-9, Journal Code: BNW, ISSN: 0961-8368;

Dimasi *et al.*, 1998, "Engineering, Characterization and Phage Display of Hepatitis C Virus NS3 Protease and NS4A Cofactor Peptide as a Single-Chain Protein," *Protein Engineering*, **11** (12): 1257-65, Journal Code: PR1, ISSN: 0269-2139

WO 9636702 A 11/1996 PCT;

WO 9708304 A 3/1997 PCT;

International Search Report.

While no fee is believed due in connection with the filing of this Information Disclosure Statement, the Commissioner is hereby authorized to charge any fee which may be required to enter this paper and/or to properly consider the references cited herein to Deposit Account No. 19-0365.

Respectfully submitted,

Schering-Plough Corporation 2000 Galloping Hill Road Patent Department, K-6-1, 1990 Kenilworth, NJ 07033 (908)298-2906 August 10, 1999

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to the Assistant Commissioner for Patents, Washington, D.C. 20231.

August 10, 1999 Date of Deposit

Jaye P. McLaughlin

Registered Representative

Signature ()

Date of Signature

Jaye P. McLaughlin Reg. No. 41,211